in darkness on 6th-7th July, 1993 due to failure of the Northern Grid;

(b) if so, the reasons of the failure;

(c) whether it is also a fact that Government have instituted an enquiry into such a failure;

(d) whether any responsibility has been fixed and if so, what action has been taken thereon; and

(e) what steps are being taken by Government to ensure regular power supply?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI P. V. RANGAYYA NAIDU): (a) and (b) No failure of the Northern Grid ooccurred on 6th-7th July, 1993. However, a major grid distrurbance occurred in Nortnern region on 6/7th June 1993. A fault was initiated either at 400 KV Switchyard of the Singrauli super thermal power station or on the Singrauli-Kanpur 400 KV transmission line. The bus bar protection at Singrauli Switchyard failed to operate which caused the tripping of all the generating units at Singrauli and Rihand super thermal power stations leading to the Grid failure.

(c) to (e) The government appointed a Committee of two experts namely S/Shri V. B. Eswaran and A.K. Sah to look into the causes of grid disturbance in the Northern Region on the night of 6/7th July, 1993 and to suggest remedial measures. The Committee has submitted an interim report on 19th July, 1993.

Recommendations of Committees on grid disturbances are implemented by concerned agencies and their implementation is monitered by Central Electricity Authority, to ensure uninterrupted power supply.

Thermal power sections causing pollution

1017. SHRI JAGMOHAN: Will the Minister of POWER be pleased to state:

(a) what is the number of Central Thermal Power units in the country that are causing pollution beyond the norms as indicated by the Ministry of Environment;

(b) what is the extent to which the quality of water in rivers and streams has been affected by the effluent discharged by these power plants; and

(c) what measures have been enforced to bring down pollution to the acceptable level and whether any time-limit has been fixed in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI P. V. RANGAYYA NAIDU): (a) Out of a total of 72 thermal power units in the Central Sector, 27 units are meeting the stack emission standards stipulater by the Ministry of Environment & Forests. 19 thermal units do not meet the requirement and corrective action on them are under way. On 26 thermal units, 8 of which are new, action has been initiated to establish system of measurement of stack omission.

(b) As per norms of the Ministry of Environment & Forests, several parameters are to be controlled before the effluents are discharged out from thermal stations. Since the parameters to be controlled are measured before discharge the water down stream is not normally expected to be affected.

(c) The pollution control equipments in old thermal stations are not adequate to meet the latest stack emission standards. In order that the latest pollution control standards are met, repairs/renovation/replacement work on these equipments has been included in the renovation and modernisation schemes being implemented under the 7th and 8th Plan periods. Works on majority of the units covered under the 7th Plan has been completed, while those under the 8th Plan are at different stages of implementation and are expected to be completed by the end of the 8th Plan.